design are: We of the things

DOE electrical engineers perform a variety of jobs, including:

- Concept design
- · Estimations of design and construction costs
- Development of design calculations
- Creation of drawings and specifications
- · Verification that suppliers and contractors meet our requirements, and participate in the start-up of our designs





STATE OF CALIFORNIA Department of Water Resources Division of Engineering

> 1416 9th Street Sacramento, CA 95814

www.doe.water.ca.gov

Department of Water Resources

CAREER OPPORTUNITIES

Electrical Engineering





Electrical Engineering

Our work includes creating design concepts, estimating design and construction costs, doing design calculations, creating drawings and specifications, verifying that suppliers and contractors meet our requirements, and participating in the start-up of our designs.

Electrical Engineering

Mixing Water and Electricity

Electrical engineers in the Division of Engineering (DOE) bring the California State Water Project (SWP) to life by designing the many and diverse electrical systems needed to keep California's water flowing. Our work deals with systems as small as a computer memory card and as large as an 80,000 HP motors. Our projects embrace dams, reservoirs, generating stations and pumping plants, and include designs for:

- Generation, transmission, switchyard and power distribution systems
- Complex, state-of-the-art computerized controls that keep the generators, pumps, gates and valves working together at more than 50 locations throughout the state

- Instruments that monitor level, flow, temperature, pressure, water quality and leaks in reservoirs and more than 600 miles of canals and pipelines
- Interior, exterior, safety and security lighting
- Intrusion, fire and security alarms
- Extensive, wide-area communication and system control and data acquisition equipment

Department electrical engineers face new challenges every day with the evaluation and testing of new products and services, such as inflatable dams, electronic fish counters, water quality pilot projects and fiber-optic communications.

A Leading Edge Career

The scope and ever-changing world of the SWP mean that electrical engineers with the Division of Engineering are always learning and growing- a promise the DOE guarantees with its continuing education program and constant on-the-job training. Your work experience counts toward the time required to obtain your California Professional

